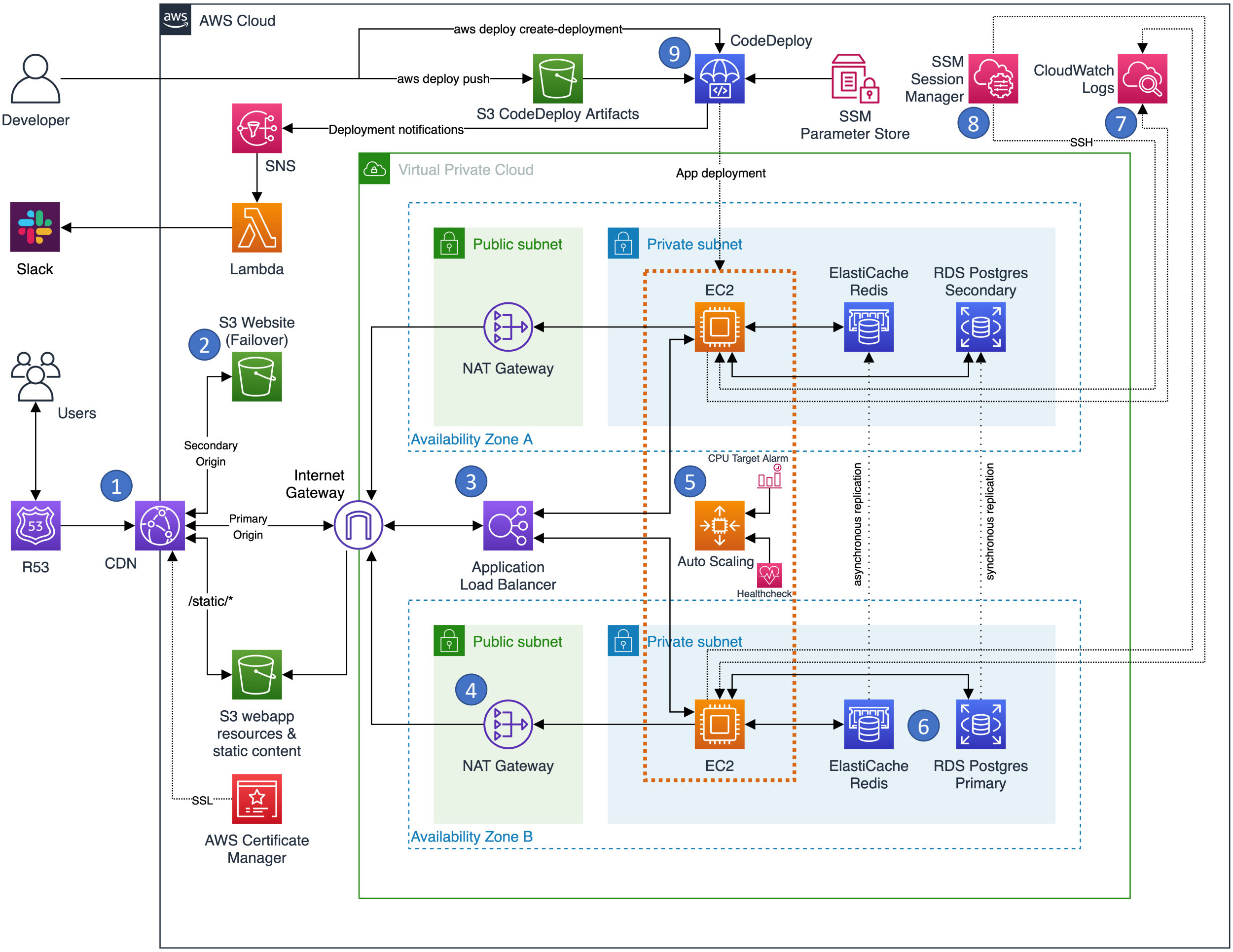

1. **Amazon Route 53** provides DNS configuration and routes traffic to **Amazon CloudFront** (Amazon's Content delivery network). CloudFront is configured with an HTTPS endpoint with SSL certificates loaded from **Amazon Certificate Manager**. The content delivery network then routes traffic either to the ALB for dynamic content, or S3 for static content.

2. CloudFront configured with an **Amazon S3 website** as a secondary custom origin, so that traffic is routed to a failover endpoint when the webapp is unavailable.

3. **Application load balancer** to distribute across an Auto Scaling group of EC2 instances in multiple availability zones.

4. **NAT Gateway** so that private EC2 instances and databases can reach the public internet. Two NAT gateways are provisioned across two AZ to provide high-availability.

5. **Auto Scaling group** of **EC2 instances** across 2 AZs, with Healthcheck enabled to replace instances with unhealthy applications, and average **CloudWatch Alarms** (Avg. CPU Target Tracking) to auto-scale based on traffic load.

6. Postgres database running on **Amazon RDS**, and frequently access data stored in-memory with the **Amazon ElastiCache** Redis cluster. Both databases are replicated to another AZ for high-availability.

7. **CloudWatch Logs** to monitor and tail real-time system and application logs from EC2 instances and Lambda functions.

8. **SSM Session Manager** to provide a secure SSH access with AWS temporary credentials and removes the need of opening port 22.

9. **Amazon CodeDeploy** to deploy new application releases to running EC2s, using artifacts stored on **Amazon S3**, and sensitive data retrieved from the **SSM Parameter Store**. CodeDeploy is also triggered on ASG scale-out events so that newly created instances are automatically provisioned with the latest application version. Deployment events notifications are delivered to **Slack** via the **Amazon Simple Notification Service** and **Amazon Lambda**.